ABSTRACT OF THE DISCLOSURE

Self modifying code is detected using a translation lookaside buffer in order to provide cache coherency. The translation lookaside buffer has physical page addresses stored therein over which snoops can be performed using the physical memory address of a store into memory. The translation lookaside buffer includes a content addressable memory which not only provides page translation but provides content addressability based on the physical page addresses stored therein. If a match occurs during a snoop using the translation lookaside buffer, it is possible that an SMC occurred within the page of locations stored in memory associated with the matched physical page addresses. To provide finer granularity than a page of addresses, FINE HIT bits are included with each entry in the cache associating information in the cache to portions of a page within memory. Snoop logic performs the comparison of the FINE HIT bits with the respective lower order bits of the physical address to determine if a self modifying code condition has occurred within the portion of memory that may be stored in the cache.